

Distribution coefficient of Pr³⁺ ions in crystals of solid solutions LiF-LuF₃-YF₃-PrF₃

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Abstract

© Published under licence by IOP Publishing Ltd. Aim of this work was to investigate the possibility of increasing the distribution coefficient of Pr³⁺ ions in fluoride crystals with scheelite structure. As a result of investigations by XRF and optical absorption spectroscopy the absorption cross section for ³H₀ ³P₀ transitions Pr³⁺ ions was clarified and segregation coefficient of Pr³⁺ ions in LiY_{0,3}Lu_{0,7}F₄ mixed crystals was estimated.

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